KOVO LIMITED
METAL AND ENGINEERING PRODUCTS
AND RAW MATERIALS TRADING COMPANY
P. O. Box 889, PRAHA (CZECHOSLOVAK

BALLISTIC CONVERSION FACTORS FOR PAGES 27 to 32

To convert Velocity m/sec. into feet per second multiply by 3.28

To convert Energy mkg into foot pounds multiply by 7.23

To convert Pressure Kg/cm^2 into pounds pressure multiply by 14.22

1 gramme equals 15.4325 grains

AMMUNITION

POVAŽSKÉ STROJÁRNE

CATALOGUE

OF PISTOL,
REVOLVER
AND RIFLE

AMMUNITION

CONTINENTAL ARMS CORP.
697 FIFTH AVE., NEW YORK 22

PRIMER

KOVO LIMITED
METAL AND ENGINEERING PRODUCTS
AND RAW MATERIALS TRADING COMPANY
P. O. Box 873, PRAHA (CZECHOSLOVAKIA)

RIFLE, REVOLVER AND PISTOL AMMUNITION

Our rifle, revolver and pistol ammunition is manufactured exactly according to international gauges so that its use is guaranteed in all weapons of international calibres.

We manufacture every current type of ammunition for

RIFLES
REVOLVERS
PISTOLS

The greatest care is given to the manufacture from the point of view of quality and checking. All component parts as well as the completed cartridges undergo a severe control with respect to gauge and appearance.

The first-class quality of our goods is guaranteed by modern production methods with up-to-date machinery, a well equipped shooting range for tests, specially trained personnel and a tradition of 50 years in this special manufacture.

Catridges of our manufacture are provided with our „T 3" percussion caps with a very stable, anticorrosive and antierosive priming.

The composition of their priming does not contain any mercury fulminate and even after many years storage, they do not lose their quality and sensitiveness. The principal advantage of our „T 3" percussion caps is that they do not cause any burning or corrosion of the barrel. Our „T 3" percussion caps are among the best percussion caps manufactured at present.

All our cartridges are loaded with special gun powders which guarantee the required ballistic qualities.

Besides the loaded cartridges specified in this catalogue, we can also supply components (cartridge cases, bullets and percussion caps) provided a minimum quantity of 5000 pieces of each type is ordered.

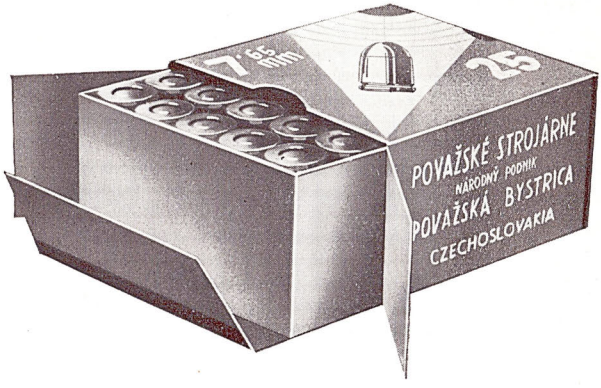
The range of cartridges as contained in this catalogue, illustrates our present programme of production. It is howerer gradually being completed by modern calibres according to the market's demand.

Orders for any special calibre required, can be booked for minimum quantities of 25.000 pieces with a reasonable delivery date.

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

Automatic Pistol Cartridges

All our pistol cartridges are supplied with non rusting and non corrosive „T 3“ percussion caps.



Automatic Pistol Cartridges

with solid bullets — standard types.

Calibre 6,35 mm (.25)
Code word ZAASF

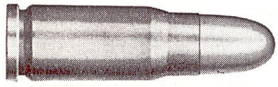
Calibre 7,65 mm (.32)
Code word ZABAM

Calibre 9 mm short (.38)
Code word ZABIP

All above cartridges are packed in boxes of 25.

Other types of automatic Pistol Cartridges

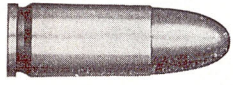
with solid bullets.



Calibre 7,63 mm Mauser (.30)

Code word ZABUR

Calibre 8,2 mm. J. Roth
(8 mm Steyr)
Code word ZACAN



Calibre 9 mm. Parabellum (Luger)
Code word ZACOR

Calibre 9 mm. Steyr
Code word ZACTY

Packed in boxes of 25, except 9 mm Parabellum which are packed in boxes of 50.

Dummy Cartridges for Pistols

For training and practice purposes we supply special dummy cartridges for various automatic pistols.

These dummy cartridges are without powder and with nickeled case and rubber percussion plug (instead of the percussion cap).

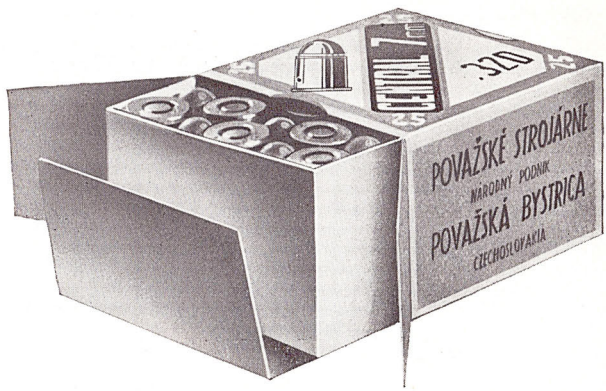
Minimum order 1000 of any calibre.

Component parts of pistol cartridges (empty cases and bullets) are not supplied separately.

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

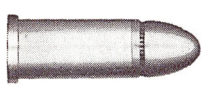
Revolver Cartridges

All our revolver catridges are supplied with non rusting and non corrosive percusion caps „T 3".

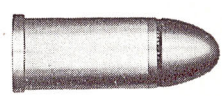


Central-fire Revolver Cartridges

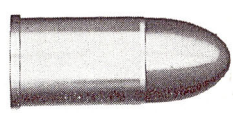
with lead bullets.



Cal. 7 mm (.320)
Code word ZAHWO



Cal 9 mm (.380)
Code word ZAIFS



Cal. 12 mm (.450)
Code word ZAIRG

All above cartridges are packed in boxes of 25.
Component parts (empty cases and bullets) are not supplied separately.

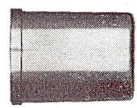
WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

Central-fire, Blank Cartridges for Revolvers

loaded with powder and card wads only.

Calibre 7 mm (.320)
Code word ZAJOY

Calibre 9 mm (.380)
Code word ZAJUZ



Calibre 12 mm (.450)
Code word ZAKAV

Special Cartridges

5,6 mm Morris (.297/.230 long)*
with solid bullet
Code word ZAKIX

5,8 mm Velo-Dog
with solid bullet
Code word ZAKUB

* .297/230 Morris Cartridges will not be manufactured in future and can only be supplied until stock is exhausted.

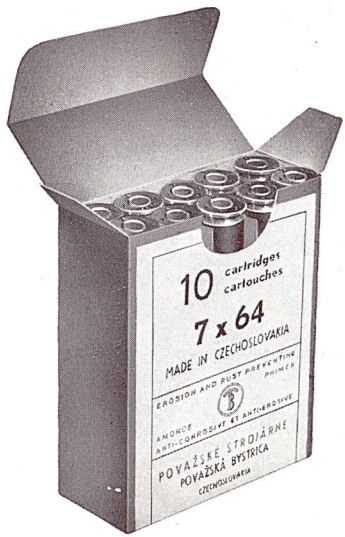
8 mm Rast-Gasser
with solid bullet
Code word ZAKZO

8 mm Nagant (Russian)
with solid bullet
Code word ZALWA

The above cartridges can be supplied also for blank-shooting. Minimum order 5000 per calibre.

Component parts (empty cases and bullets) are not supplied separately. All above cartridges are packed in boxes of 25.

Central-fire Rifle Cartridges



Rifle cartridges of our manufacture listed in this catalogue are designated according to European practice by three figures: 1⁰) Calibre size; 2⁰) Length of the brass case in millimeters; 3⁰) The factory number of the bullet. In the case of Rim-cartridges the letter „R" is added. Thus 5.6×35 R/67 means: Calibre 5,6 mm, length of case: 35 mm, with rim, and with bullet No 67. English calibres are designated in addition to the European calibres in inches, for example: .360/8×57.

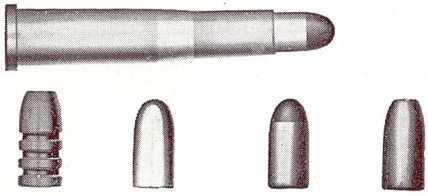
When ordering please give full description of the cartridges required. Cartridges with soft-nosed bullets Nrs. 99, 65, 130 and 89 will be supplied until stock is exhausted.

Cartridges for proof testing of Fire Arms

Cartridges specially loaded to test the safety of rifles are supplied to manufacturers of fire arms and gunsmiths. They develop a 33% higher pressure than normal cartridges. These special cartridges can be recognized by a milled edge rim round the case and by the packing marked: „For proof testing". They can by supplied on special demand.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

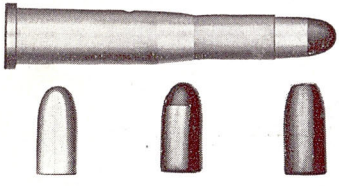
PRIMER



5,6 x 35 R
Vierling
(.22 C. F.)

2	41	67	100	FACTORY No
lead	solid copper	soft-n. copper	hollow-p. copper	Type of bullet
12	12	12	12	Length in mm
2,7	2,55	2,55	2,55	Weight in grammes
ZAPID	ZAPOF	ZAPUG	ZAPYH	Code word

Cartridges with lead bullet are not suitable for use in rifles adapted for copper or nickel covered bullets.

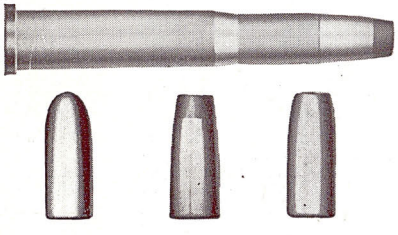


5,6 x 35 R
Vierling - rasant
(.22 flat trajectory)

These Cartridges are adapted to »Hornet« rifles

41	67	100	FACTORY No
solid copper	soft-n copper	hollow-p. copper	Type of bullet
12	12	12	Length in mm
2,55	2,55	2,55	Weight in grammes
ZAFRE	ZARHO	ZARIG	Code word

Cartridges 5,6×55 R Vierling-rasant have an increased powder load by 0,6 gramme and are therefore not suitable for certain old models of rifles with weak breech mechanism.



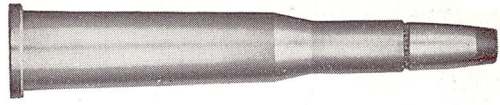
6,5 x 41 R
(.25-20)

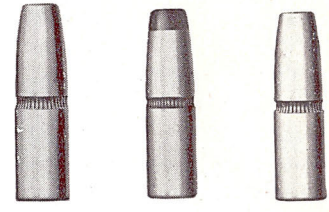
68	69	101	FACTORY No
solid	soft-n.	hollow-p.	Type of bullet
17	16,5	16,5	Length in mm
5	5	5	Weight in grammes
ZASYL	ZATAG	ZATHE	Code word

All above cartridges are packed in boxes of 20.

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

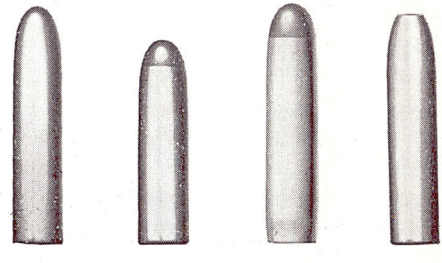
6,5 x 52 R
(.25-35)
with rim





FACTORY No	48	70	103
Type of bullet	solid	soft-n.	hollow-p.
Length in mm	25	25	25
Weight in grammes	7,6	7,6	7,6
Code word	ZATOK	ZATUL	ZAUCS

6,5 x 53 R
also called 6,7x53 R
(.256 Mannlicher
with rim)



FACTORY No	45	71	72	104
Type of bullet	solid	soft-n.	soft-n.	hollow-p.
Length in mm	32	27,5	30,5	30,5
Weight in grammes	10,3	9	10	10
Code word	ZAUTL	ZAVAH	ZAVNY	ZAVLO

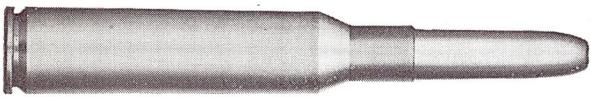
All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

PRIMER

6,5 x 54 M.Sch.

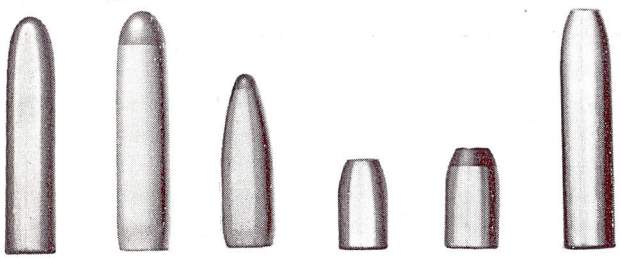
(.256 or 6,5 m/m Mannlicher-Schönauer)



45	71	72	98	99	104	FACTORY No
solid	soft-n.	soft-n.	solid	soft-n.	hollow-p.	Type of bullet
32	27,5	30,5	12	12	30,5	Length in mm
10,3	9	10	3,35	3,35	10	Weight in grammes
ZAVYN	ZAVUM	ZAWEK	ZAWIL	ZAWJA	ZAWMO	Code word

6,5 x 57

(.256 or 6,5 m/m Mauser/88)



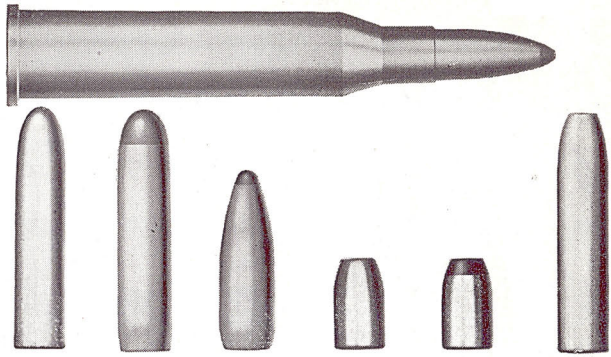
45	72	92	98	99	104	FACTORY No
solid	soft-n.	soft-n.	solid	soft-n.	hollow-p.	Type of bullet
32	30,5	22	12	12	30,5	Length in mm
10,3	10	6	3,35	3,35	10	Weight in grammes
ZAYAK	ZAYBS	ZAYEL	ZAYHZ	ZAYKA	ZAYNO	Code word

Cartridges with bullets No 98 and 99 are for use during close season and for small animals.

All above cartridges are packed in boxes of 10.

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

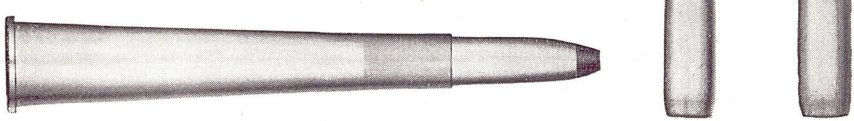
6,5 x 57 R
(.256 with rim)



FACTORY No	45	72	92	98	99	104
Type of bullet	solid	soft-n.	soft-n.	solid	soft-n.	hollow-p.
Length in mm	32	30,5	22	12	12	30,5
Weight in grammes	10,3	10	6	3,35	3,35	10
Code word	ZAYUP	ZAZEM	ZAZLA	ZAZRY	ZAZOP	ZEACS

Cartridges with bullets No 98 and 99 are for use during close season and for small animals.

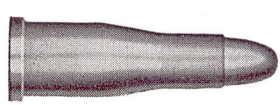
6,5 x 58 R
(6,6 x 58,5)
with rim



FACTORY No	97	102
Type of bullet	soft-n.	hollow-p.
Length in mm	26	26
Weight in grammes	8,2	8,2
Code word	ZEADT	ZEAHY

All above cartridges are packed in boxes of 10.

6,8 x 28
(Tesching)
with lead bullet



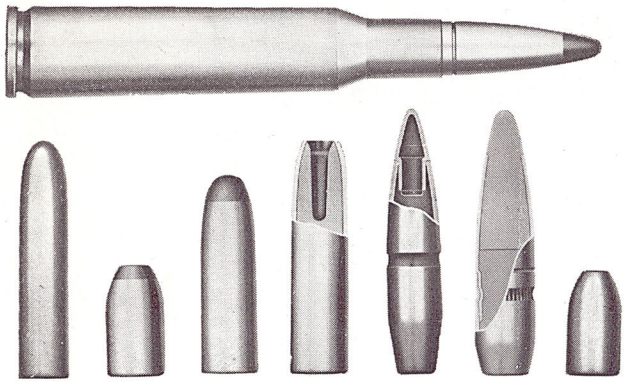
Code word ZEBIT

Discontinued. Will be supplied until stock is exhausted.
The above cartridges are packed in boxes of 25.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

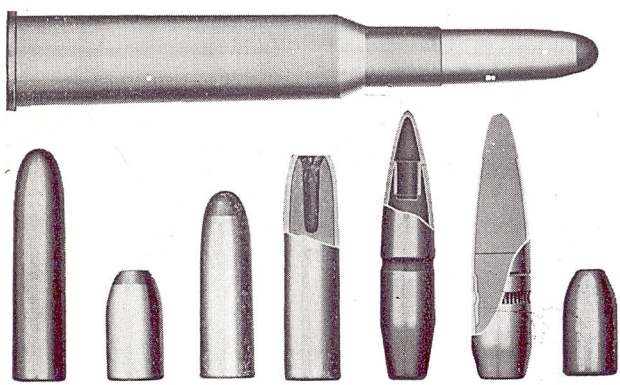
PRIMER

7 x 57
(.276 or 7 m/m Mauser)



46	65	66	105	126	128	129	FACTORY No
solid	soft-n.	soft-n.	hollow-p.	special	special	solid	Type of bullet
31	14	25	30	36	32	14	Length in mm
11,2	5	9	11,2	10,2	10	5	Weight in grammes
ZEBYX	ZECAS	ZEBVO	ZECIV	ZECWO	ZECTE	ZECUX	Code word

7 x 57 R
(.276 with rim)



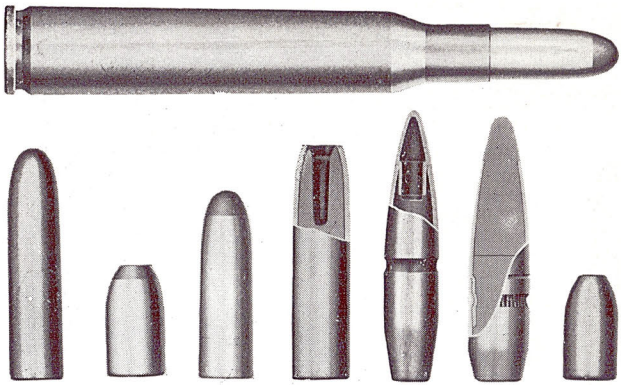
46	65	66	105	126	128	129	FACTORY No
solid	soft-n.	soft-n.	hollow-p.	special	special	solid	Type of bullet
31	14	25	30	36	32	14	Length in mm
11,2	5	9	11,2	10,2	10	5	Weight in grammes
ZEDEV	ZEDOY	ZEDTA	ZEDUZ	ZEECT	ZEEGY	ZEEBS	Code word

Cartridges with bullets No 65 and 129 are for use during close season and for small animals.

All above cartridges are packed in boxes of 10.

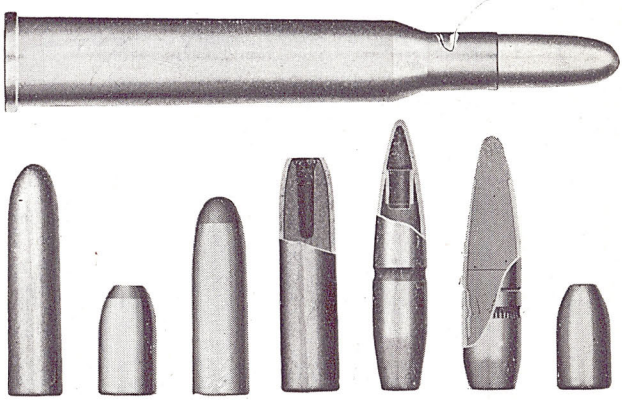
NON RUSTING AND NON CORROSIVE PERCUSSION CAP

7 x 64
Case Brenneke
(.276)



FACTORY No	46	65	66	105	126	128	129
Type of bullet	solid	soft-n.	soft-n.	hollow-p.	special	special	solid
Length in mm	31	14	25	30	36	32	14
Weight in grammes	11,2	5	9	11,2	10,2	10	5
Code word	ZEEMF	ZEENG	ZEEPH	ZEERK	ZEEWP	ZEFAV	ZEFIX

7 x 65 R
Case Brenneke
(.276 with rim)



FACTORY No	46	65	66	105	126	128	129
Type of bullet	solid	soft-n.	soft-n.	hollow-p.	special	special	solid
Length in mm	31	14	25	30	36	32	14
Weight in grammes	11,2	5	9	11,2	10,2	10	5
Code word	ZEFWE	ZEFZO	ZEGBO	ZEGIZ	ZEGYE	ZEGUC	ZEGWA

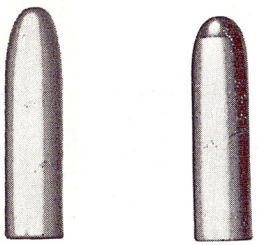
Cartridges with bullets No 65 and 129 are for use during close season and for small animals.

All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

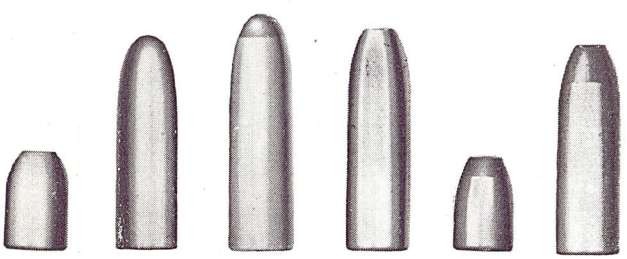
PRIMER

7,8 x 53
(.301 or 7,65 m/m Mauser)



	50	**75**	
	solid	soft-n.	**FACTORY No**
	51	30	Type of bullet
	13,3	13,3	Length in mm
	ZEHEZ	ZEHIB	Weight in grammes
			Code word

.360/8 x 57 R



	53	**54**	**79**	**107**	**130**	**131**	
	solid	solid	soft-n.	hollow-p.	soft-n.	soft-n.	**FACTORY No**
	12,5	27,5	28	28	12,5	26,5	Type of bullet
	5,45	12,5	13,2	13	5,45	12,7	Length in mm
	ZEKEC	ZEKFO	ZEKID	ZELAC	ZEKUG	ZEKYH	Weight in grammes
							Code word

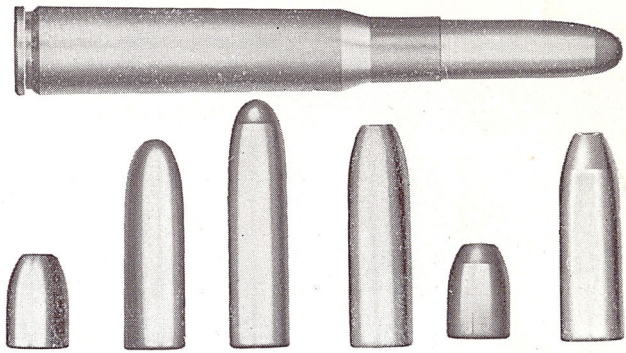
Cartridges with bullets No 53 and 130 are for use during close season and for small animals.

All above cartridges are packed in boxes of 10.

POVAŽSKÉ STROJÁRNE

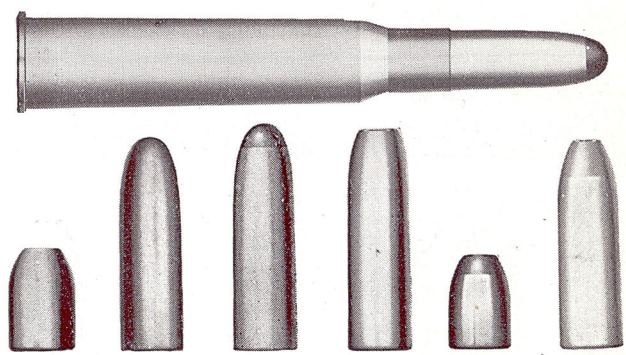
NON RUSTING AND NON CORROSIVE PERCUSSION CAP

8 x 57
(8x57 J*)
(.311 or 7,9 m/m Mauser)



FACTORY No	53	54	81	107	130	131
Type of bullet	solid	solid	soft-n.	hollow-p.	soft-n.	soft-n.
Length in mm	12,5	27,5	33	28	12,5	26,5
Weight in grammes	5,45	12,5	15,5	13	5,45	12,7
Code word	ZEHZE	ZEIBT	ZEIFY	ZEIKD	ZEILF	ZEIRL

8 x 57 R
(8 x 57 JR*)
(.311 with rim)



FACTORY No	53	54	79	107	130	131
Type of bullet	solid	solid	soft-n.	hollow-p.	soft-n.	soft-n.
Length in mm	12,5	27,5	28	28	12,5	26,5
Weight in grammes	5,45	12,5	13,2	13	5,45	12,7
Code word	ZEJEB	ZEJIC	ZEJOD	ZEJUF	ZEJYG	ZEJZA

Cartridges with bullets No 53 and 130 are for use during close season and for small animals.

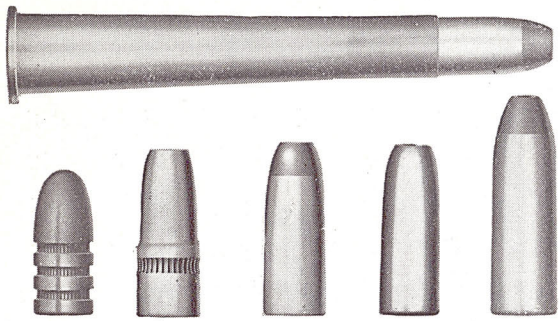
All above cartridges are packed in boxes of 10.

** Cartridges 8×57 and 8×57 R are provided with bullets of the maximum diameter of 8,1 mm and are used in rifles of calibre 8 mm with the minimum diameter of lands 7,80 mm and with the minimum diameter of grooves 8,07 mm.*

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

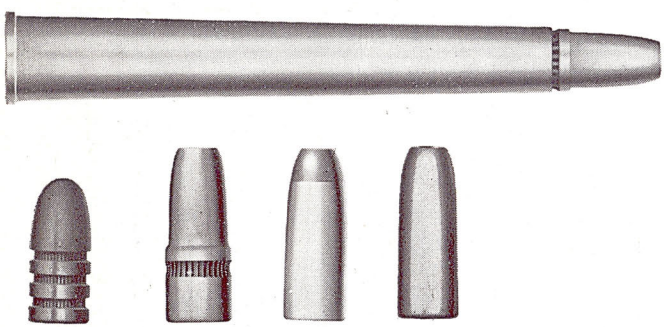
3 PRIMER

8 x 58 SSC



12	76	77	106	131	FACTORY No
lead	soft-n. copper	soft-n.	hollow-p.	soft-n.	Type of bullet
19,5	21	22	22,5	26,5	Length in mm
9,2	9,8	10,15	10,1	12,7	Weight in grammes
ZELED	ZELGO	ZELIF	ZELJY	ZELUH	Code word

8 x 72 R
(.360/8 x 72)



12	76	77	106	FACTORY No
lead	soft-n. copper	soft-n.	hollow-p.	Type of bullet
19,5	21	22	22,5	Length in mm
9,2	9,8	10,15	10,1	Weight in grammes
ZEMDA	ZEMEF	ZEMIG	ZEMHO	Code word

All above cartridges are packed in boxes of 10.

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

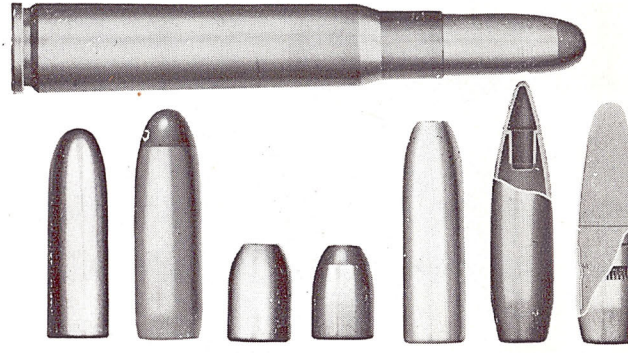
Important notice.

Cartridges cal. 8 mm, designated by letter „S" such as 8×57 S, 8×60 S, 8×64 S and cartridges 8×56 Mannlicher-Schönauer have bullets with maximum diameter of 8,22 mm which is larger than the diameter of bullets for calibres 8×57 and 8×57 R (without „S"). Weapons for cartridges calibre „S" have a minimum diameter of grooves 8,20 mm, and a minimum diameter of lands 7,89 mm. It is dangerous to use cartridges calibre „S" in rifles with the bore 7,80/8,07 mm as the larger diameter of the bullets causes a considerably higher breech pressure which may damage the rifle.

When ordering please give full description of the cartridges required to avoid the wrong execution of the order.

8 x 57 S

also called
8,2 x 57
(.315 or 8m/m
Mauser)



FACTORY No	57	84	88	89	109	121	127
Type of bullet	solid	soft-n.	solid	soft-n.	hollow-p.	special	special
Length in mm	28	28	12,5	12,5	28	35	31
Weight in grammes	13,3	13,3	5,45	5,45	13,4	12,5	12,7
Code word	ZENUK	ZENYL	ZEODY	ZEOJD	ZEOLG	ZEONJ	ZEOPK

Cartridges with bullets No 88 and 89 are for use during close season and for small animals.

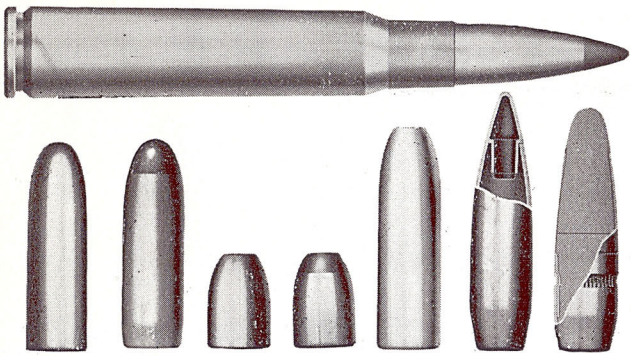
All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

PRIMER

8 x 60 S

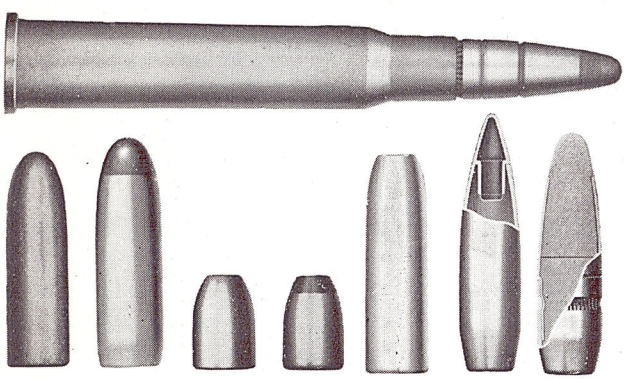
(8,2 x 60)
(.315 Magnum or
8 m/m x 60)



57	84	88	89	109	121	127	FACTORY No
solid	soft-n.	solid	soft-n.	hollow-p.	special	special	Type of bullet
28	28	12,5	12,5	28	35	31	Length in mm
13,3	13,3	5,45	5,45	13,4	12,5	12,7	Weight in grammes
ZEOZT	ZEPGA	ZEPHE	ZEPIJ	ZEPKO	ZEPMY	ZEPUL	Code word

8 x 60 RS

(.315 Magnum)
with rim



57	84	88	89	109	121	127	FACTORY No
solid	soft-n.	solid	soft-n.	hollow-p.	special	special	Type of bullet
28	28	12,5	12,5	28	35	31	Length in mm
13,3	13,3	5,45	5,45	13,4	12,5	12,7	Weight in grammes
ZIARN	ZIASP	ZIAWS	ZIAXT	ZIBBO	ZIBIZ	ZIBUC	Code word

Cartridges with bullets No 88 and 89 are for use during close season and for small animals.

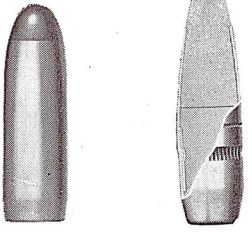
All above cartridges are packed in boxes of 10.

POVAŽSKÉ STROJÁRNE

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

8 x 64 S

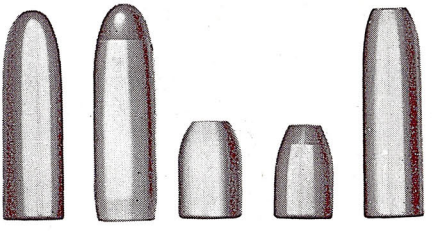
Case Brenneke



FACTORY No	84	127
Type of bullet	soft-n.	special
Length in mm	28	31
Weight in grammes	13,5	12,7
Code word	ZERAJ	ZEREK

8 x 56 M. Sch.

(.315 or 8 m/m Mannlicher-Schönauer)



FACTORY No	57	84	88	89	109
Type of bullet	solid	soft-n.	solid	soft-n.	hollow-p.
Length in mm	28	28	12,5	12,5	28
Weight in grammes	13,3	13,3	5,45	5,45	13,4
Code word	ZEMUJ	ZEMYK	ZENAF	ZENEG	ZENJO

Cartridges with bullets No 88 and 89 are for use during close season and for small animals.

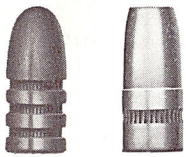
All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

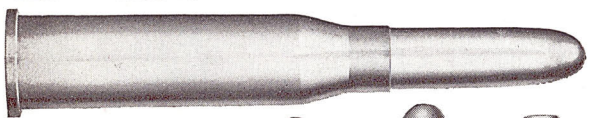
3 PRIMER

For Target Rifles

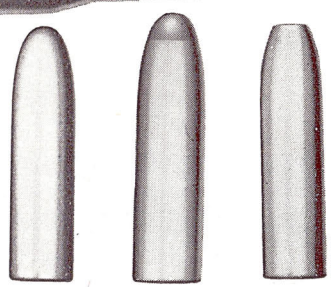
8,15 x 46 R
with rim



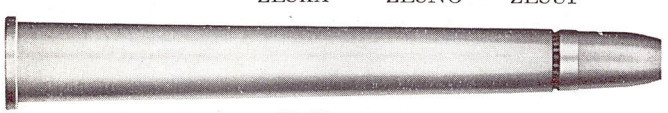
12	83	FACTORY No
lead	soft-n. copper	Type of bullet
19,5	19,5	Length in mm
9,2	9,7	Weight in grammes
ZERPY	ZERMO	Code word



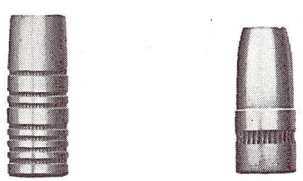
8,2 x 50 R
(.315 or 8 m/m Mannlicher)



58	87	110	FACTORY No
solid	soft-n.	hollow-p.	Type of bullet
32,5	55	52	Length in mm
15,8	16	15,8	Weight in grammes
ZESKA	ZESNO	ZESUP	Code word



8,2 x 72 R
with rim



15	83	FACTORY No
lead	soft-n. copper	Type of bullet
21	19,5	Length in mm
11,15	9,7	Weight in grammes
ZETEM	ZETLA	Code word

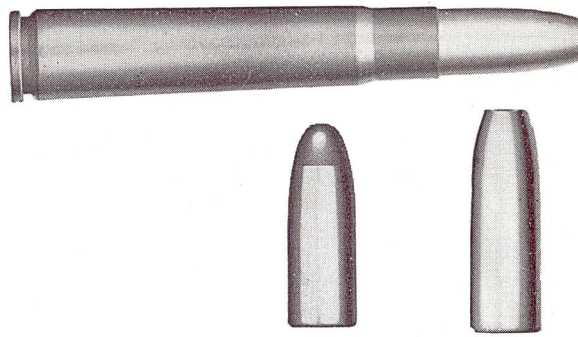
All above cartridges are packed in boxes of 10.

POVAŽSKÉ STROJÁRNE

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

9 x 56 M. Sch.

(.355 or 9 m/m Mannlicher-Schönauer)



FACTORY No	91	111
Type of bullet	soft-n.	hollow-p.
Length in mm	27	28
Weight in grammes	16,1	16,1
Code word	ZETPO	ZETRY

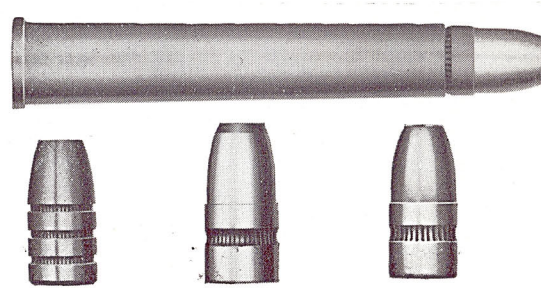
9,1 x 40 R

with rim

Code word ZEVEN

Cartridges with lead bullet factory No **18**, length of the bullet 16,5 mm, weight 9,1 grammes.

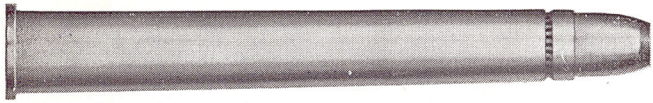
.360/9,3 x 57 R



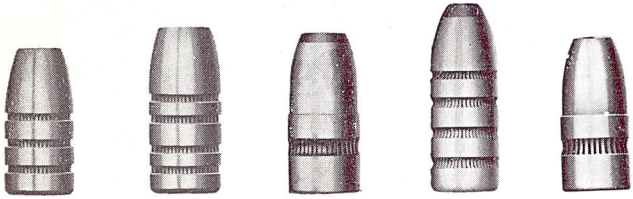
FACTORY No	22	61	113
Type of bullet	lead	soft-n. copper	hollow-p. copper
Length in mm	19,5	20	20
Weight in grammes	12,15	12,5	12,5
Code word	ZEVMA	ZEVNE	ZEVSY

All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW



9,3 x 72 R
Standard type



22	24	61	94	113	FACTORY No
lead	lead	soft-n. copper	soft-n. copper	copper	Type of bullet
19,5	22	20	25	20	Length in mm
12,15	14,45	12,5	14,7	12,5	Weight in grammes
ZEVYS	ZEWEP	ZEWNA	ZEWOR	ZEWTY	Code word

Cartridges with lead bullet No 24 will be supplied until stock is exhausted.

These cartridges were formerly called .360/9,3×72 and were indentical with the German type .360/9.3×72 D. Besides some factories manufactured cartridges .360/9,3×72 E (English type), .360/9,3×72 Nimrod and 9,3×72 S & S. The dimensions of all these cartridges differed only slightly from each other but it was impossible to interchange them without previous adaptation of the cartridge chamber. In order to eliminate these diversities certain ammunition factories introduced some time ago, for the sake of standardisation and simplification, a new type of cartridge designed 9.3×72 R standard-type. The older types were supplied only until the stock became exhausted. In order to use these cartridges it was necessary to modify slightly the cartridge chamber. Present weapons are chambered only for cartridges of the standard gauge and for that reason we supply only standard type cartridges 9,3×72 R.

9,5x57 M.Sch.
(.375 or 9,5 m/m
Mannlicher-Schönauer)

64	96	117	FACTORY No
solid	soft-n.	hollow-p.	Type of bullet
26	26	22,5	Length in mm
17,5	17,5	16,75	Weight in grammes
ZEYIR	ZEYLJ	ZEYMK	Code word

All above cartridges are packed in boxes of 10.

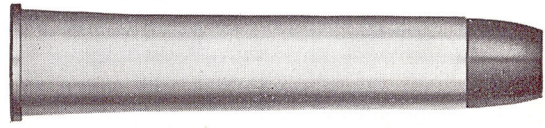
11,15 x 36 R
(Werndl rifle)

Cartridge with lead bullet No **34**, length 24 mm, weight 18,8 g.
Code word ZEZER

11,2 x 51 R
(Kropatschek-Heisig)

Cartridge with lead bullet No **34**, length of the bullet 20 mm, weight 18,8 g.
Code word ZEZTO

11,6 x 60 R
also called
.450/11, 6 x 60



Cartridge with lead bullet No **39**,
length of the bullet 20,5 mm, weight 20,5 g.

Can be used also for weapons of calibre 11,6×65 R.

Code word ZEZWY

12,7 x 60R

Cartridge with lead bullet No **40**,
length of the bullet 22 mm, weight 26,6 g.

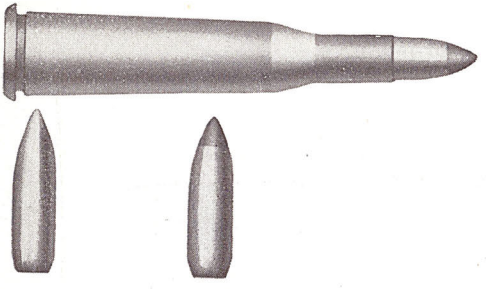
Discontinued. Will be supplied until stock is exhausted.

Code word ZIADZ

All above cartridges are packed in boxes of 10.

WILL KEEP THE BARREL OF YOUR RIFLE AS NEW

CARTRIDGES INTRODUCED RECENTLY



5,6 x 52 R
(.22 High Power)

42	**63**	FACTORY No
solid	soft-n.	Type of bullet
21,—	21,—	Length in mm
4,65	4,65	Weight in grammes
ZARYK	ZASAF	Code word

9,3 x 62
(.366 or 9,3 m/m Mauser)

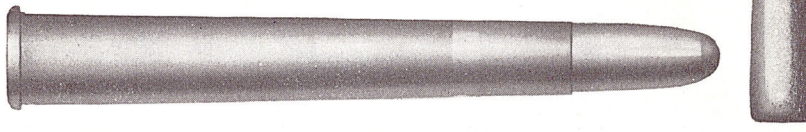
93	FACTORY No
soft-n.	Type of bullet
30,—	Length in mm
18,5	Weight in grammes
ZICAY	Code word

All above cartridges are packed in boxes of 10.

POVAŽSKÉ STROJÁRNE

NON RUSTING AND NON CORROSIVE PERCUSSION CAP

9,3 x 74 R
with rim



FACTORY No	93
Type of bullet	soft-n.
Length in mm	30,—
Weight in grammes	18,5
Code word	ZICIB

10,75 x 68
(.423 or 10,75 m/m Mauser)

FACTORY No	55	90
Type of bullet	solid	soft-n.
Length in mm	27,5	27,5
Weight in grammes	22,5	22,5
Code word	ZICZE	ZIDAZ

All above cartridges are packed in boxes of 10.

Standard ballistics of Rifle Cartridges

Description	Code Word	Bullet			Powder		Velocity V_{25} m/sec.	Energy E_{25} mkg	Barrel length	Maximum pressure kg/cm²	
		Factory No.	Weight in grammes *	Length in M/M **	Kind	Weigth in grammes *					
5,6 × 35 R Vierling (.22 C. F.)	ZAPID	2	2,7	12,—	R. V.	0,40	—	—	600	1450	
	ZAPOF	41	2,55	12,—	R. V.	0.45	525	56			
	ZAPUG	67	2,55	12,—	R. V.	0,45	525	56			
	ZAPYH	100	2,55	12,—	R. V.	0,45	525	56			
5,6 × 35 R Vierling rasant (.22 flat trajectory)	ZAFRE	41	2,55	12,—	R. V.	0,60	695	63	600	2400	
	ZARHO	67	2,55	12,—	R. V.	0,60	695	63			
	ZARIG	100	2,55	12,—	R. V.	0,60	695	63			
6,5 × 41 R (.25—20)	ZASYL	68	5,—	17,—	SM 45	0,65	465	55	650	2800	
	ZATAG	69	5,—	16,5	SM 45	0,65	465	55			
	ZATHE	101	5,—	16,5	SM 45	0,65	465	55			
6,5 × 52 R (.25—35) with rim	ZATOK	48	7,6	25,—	SM 5	1,65	640	159	600	2200	
	ZATUL	70	7,6	25,—	SM 5	1,65	640	159			
	ZAUCS	103	7,6	25,—	SM 5	1,65	640	159			
6,5 × 53 R (.256 Mannlicher) with rim	ZAUTL	45	10,3	32,—	SM 5	2,35	700	257	680	3000	
	ZAVAH	71	9,—	27,5	SM 5	2,45	725	241			
	ZAVNY	72	10,—	30,5	SM 5	2,40	705	257			
	ZAVLO	104	10,—	30,5	SM 5	2,40	705	257			
6,5 × 54 M. Sch. (.256 or 6,5 M/M) Mannlicher-Schönauer)	ZAVYN	45	10,3	32,—	SM 5	2,30	645	218	450	3200	
	ZAVUM	71	9,—	27,5	SM 5	2,40	685	215			
	ZAWEK	72	10,—	30,5	SM 5	2,30	650	215			
	ZAWIL	98	3,35	12,—	SM 12	1,00	650	72			
	ZAWJA	99	3,35	12,—	SM 12	1,00	650	72			
	ZAWMO	104	10,—	30,5	SM 5	2,30	650	215			

Description	Code Word	Bullet			Powder		Velocity V_{25} m/sec.	Energy E_{25} mkg	Barrel length	Maximum pressure kg/cm²	
		Factory No.	Weight in grammes *	Length in M/M **	Kind	Weight in grammes *					
6,5 × 57 (.256 or 6,5 M/M Mauser/88)	ZAYAK	45	10,3	32,—	SM 5	2,25	655	225	600	3400	
	ZAYBS	72	10,—	30,5	SM 5	2,25	660	222			
	ZAYEL	92	6,—	22,—	SM 5	2,95	965	285			
	ZAYHZ	98	3,35	12,—	SM 12	1,—	650	72			
	ZAYKA	99	3,35	12,—	SM 12	1,—	650	72			
	ZAYNO	104	10,—	30,5	SM 5	2,25	660	222			
6,5 × 57 R (.256 with rim)	ZAYUP	45	10,3	32,—	SM 5	2,25	665	232	660	2900	
	ZAZEM	72	10,—	30,5	SM 5	2,25	670	229			
	ZAZLA	92	6,—	22,—	SM 5	2,85	975	291			
	ZAZRY	98	3,35	12,—	SM 12	1,—	660	74			
	ZAZOP	99	3,35	12,—	SM 12	1,—	660	74			
	ZEACS	104	10,—	30,5	SM 5	2,25	670	229			
6,5 × 58 R (6,6 x 58,5) with rim	ZEADT	97	8,2	26,—	SM 5	1,65	640	171	600	2500	
	ZEAHY	102	8,2	26,—	SM 5	1,65	640	171			
7 × 57 (.276 or 7 M/M Mauser)	ZEBYX	46	11,2	31,—	SM 2	2,70	695	276	600	3400	
	ZECAS	65	5,—	14,—	SM 12	1,10	600	92			
	ZEBVO	74	11,2	30,—	SM 2	2,70	695	276			
	ZECIV	105	11,2	30,—	SM 2	2,70	695	276			
	ZECWO	126	10,2	36,—	SM 2	2,75	740	285			
	ZECTE	128	10,—	32,—	SM 2	2,75	745	283			
	ZECUX	129	5,—	14,—	SM 12	1,10	600	92			
7 × 57 R (.276 with rim)	ZEDEV	46	11,2	31,—	SM 2	2,70	695	276	600	3000	
	ZEDOY	65	5,—	14,—	SM 12	1,10	600	92			
	ZEDTA	74	11,2	30,—	SM 2	2,70	695	276			
	ZEDUZ	105	11,2	30,—	SM 2	2,70	695	276			
	ZEECT	126	10,2	36,—	SM 2	2,75	740	285			
	ZEEGY	128	10,—	32,—	SM 2	2,75	745	283			
	ZEEBS	129	5,—	14,—	SM 12	1,10	600	92			

7 × 64 Case Brenneke (.276)	ZEEMF	46	11,2	31,—	SM 2	3,00	745	317	600	3600	
	ZEENG	65	5,—	14,—	SM 12	1,20	600	92			
	ZEEPH	66	9,—	25,—	SM 2	3,30	825	312			
	ZEERK	105	11,2	30,—	SM 2	3,00	745	317			
	ZEEWP	126	10,2	56,—	SM 2	3,05	785	314			
	ZEFAV	128	10,—	52,—	SM 2	3,05	790	318			
	ZEFIX	129	5,—	14,—	SM 12	1,20	600	92			
7 × 65 R Case Brenneke (.276 with rim)	ZEFWE	46	11,2	31,—	SM 2	3,00	770	338	680	3300	
	ZEFZO	65	5,—	14,—	SM 12	1,20	610	95			
	ZEGBO	66	9,—	25,—	SM 2	3,30	850	331			
	ZEGIZ	105	11,2	30,—	SM 2	3,00	770	338			
	ZEGYE	126	10,2	56,—	SM 2	3,05	800	333			
	ZEGUC	128	10,—	52,—	SM 2	3,05	805	330			
	ZEGWA	129	5,—	14,—	SM 12	1,20	610	95			
7,8 × 53 (.301 or 7,65 M/M Mauser)	ZEHEZ	50	15,3	31,—	SM 5	2,45	650	286	740	3100	
	ZEHIB	75	15,3	50,—	SM 5	2,45	650	286			
.360/8 × 57 R	ZEKEC	53	5,45	12,5	SM 12	1,10	555	86	670	2200	
	ZEKFO	54	12,5	27,5	SM 5	2,35	595	246			
	ZEKID	79	15,2	28,—	SM 12	2,10	540	196			
	ZELAC	107	15,—	28,—	SM 5	2,10	545	197			
	ZEKUG	130	5,45	12,5	SM 5	1,10	555	197			
	ZEKYH	131	12,7	26,5	SM 5	2,35	590	225			
8 × 57 (.311 or 7,9 M/M Mauser)	ZEHZE	53	5,45	12,5	SM 12	1,10	535	80	680	3400	
	ZEIBT	54	12,5	27,5	SM 5	2,70	690	303			
	ZEIFY	81	15,5	33,—	SM 5	2,45	600	284			
	ZEIKD	107	15,—	28,—	SM 5	2,65	670	297			
	ZEILF	130	5,45	12,5	SM 12	1,10	535	80			
	ZEIRL	131	12,7	26,5	SM 5	2,75	685	304			
8 × 57 R (.311 with rim)	ZEJEB	53	5,45	12,5	SM 12	1,10	560	87	680	2800	
	ZEJIC	54	12,5	27,5	SM 5	2,60	655	273			
	ZEJOD	79	15,2	28,—	SM 5	2,40	640	276			
	ZEJUF	107	15,—	28,—	SM 5	2,55	645	276			
	ZEJYG	130	5,45	12,5	SM 12	1,10	560	87			
	ZEJZA	131	12,7	26,5	SM 5	2,60	650	273			

Description	Code Word	Bullet			Powder		Velocity V_{25} m/sec.	Energy E_{25} mkg	Barrel length	Maximum pressure kg/cm²	
		Factory No.	Weight in grammes *	Length in M/M **	Kind	Weigth in grammes *					
8 × 58 SSC.	ZELED	12	9,2	19,5	N. 8	2,20	—	—	650	2000	
	ZELGO	76	9,8	21,—	SM 2	2,45	580	168			
	ZELIF	77	10,15	22,—	SM 2	2,35	570	168			
	ZELJY	106	10,1	22,5	SM 2	2.35	570	167			
	ZELUH	131	12,7	26,5	SM 2	2,25	550	196			
8 × 72 R **(.360/8 x 72)**	ZEMDA	12	9,2	19,5	N. 8	3,00	—	—	680	2500	
	ZEMEF	76	9,8	21,—	SM 5	2,35	625	195			
	ZEMIG	77	10,15	22,—	SM 5	2,35	615	196			
	ZEMHO	106	10,1	22,5	SM 5	2,35	615	195			
8 × 56 M. Sch. **(.315 or 8 M/M Mannlicher-Schönauer)**	ZEMUJ	57	13,3	28,—	SM 5	2,85	630	269	500	2800	
	ZEMYK	84	13,3	28,—	SM 5	2,85	630	269			
	ZENAF	88	5,45	12,5	SM 12	1,10	525	77			
	ZENEG	89	5,45	12,5	SM 12	1,10	525	77			
	ZENJO	109	13,4	28,—	SM 5	2,85	630	271			
8 × 57 S **(.315 or 8 M/M Mauser)**	ZENUK	57	13,3	28,—	SM 5	2,90	680	314	600	3400	
	ZENYL	84	13,3	28,—	SM 5	2,90	680	314			
	ZEODY	88	5,45	12,5	SM 12	1,10	540	81			
	ZEOJD	89	5,45	12,5	SM 12	1,10	540	81			
	ZEOLG	109	13,4	28,—	SM 5	2,90	680	316			
	ZEONJ	121	12,5	35,—	SM 5	3,05	740	349			
	ZEOPK	127	12,7	31,--	SM 5	3,05	735	350			
8 × 60 S **(.315 Magnum or 8 M/M x 60)**	ZEOZT	57	13,3	28,—	SM 5	3,15	710	342	600	3500	
	ZEPGA	84	13,3	28,—	SM 5	3,15	710	342			
	ZEPHE	88	5,45	12,5	SM 12	1,20	550	84			
	ZEPIJ	89	5,45	12,5	SM 12	1,20	550	84			
	ZEPKO	109	13,4	28,—	SM 5	3,15	710	344			
	ZEPMY	121	12,5	35,—	SM 5	3,15	765	373			
	ZEPUL	127	12,7	31,—	SM 5	3,15	760	374			

8 × 60 RS **(.315 Magnum with rim)**	ZIARN	57	13,3	28,—	SM 5	3,15	720	351	650	3000	
	ZIASP	84	13,3	28,—	SM 5	3,15	720	351			
	ZIAWS	88	5,45	12,5	SM 12	1,20	555	86			
	ZIAXT	89	5,45	12,5	SM 12	1,20	555	86			
	ZIBBO	109	13,4	28,—	SM 5	3,15	715	349			
	ZIBIZ	121	12,5	35,—	SM 5	3,15	770	378			
	ZIBUC	127	12,7	31,—	SM 5	3,15	765	379			
8 × 64 S **Case Brenneke**	ZERAJ	84	13,3	28.—	SM 5	3,20	740	361	600	3500	
	ZEREK	127	12,7	31,—	SM 5	3,50	800	414			
8,15 × 46 R **with rim**	ZERPY	12	9,2	19,5	N. 8	1,90	—	—	710	1500	
	ZERMO	83	9,7	19,5	SM 5	1,50	560	155			
8,2 × 50 R **(.315 or 8 M/M Mannlicher)**	ZESKA	58	15,8	32,5	SM 5	2,75	625	313	600	3100	
	ZESNO	87	16,—	33,—	SM 5	2,75	620	313			
	ZESUP	110	15,8	32,—	SM 5	2,75	625	313			
8,2 × 72 R **with rim**	ZETEM	15	11,15	21,—	N. 8	3,00	—	—	680	2500	
	ZETLA	83	9,7	19,5	SM 5	2,40	620	190			
9 × 56 M. Sch. **(.355 or 9 M/M** **Mannlicher-Schönauer)**	ZETPO	91	16,1	27,—	SM 5	2,75	575	271	500	2400	
	ZETRY	111	16,1	28,—	SM 5	2,75	575	271			
9,1 × 40 R **with rim**	ZEVEN	18	9,1	16,5	N. 8	1,50	550	140	710	1600	
.360/9,3 × 57 R	ZEVMA	22	12,15	19,5	N. 8	2,70	—	—	650	2600	
	ZEVNE	61	12,5	20,—	SM 5	2,40	585	218			
	ZEVSY	113	12,5	20,—	SM 5	2,40	585	218			
9,3 × 72 R **Standard Type**	ZEVYS	22	12,15	19,5	N. 8	3,00	—	—	600	1800	
	ZEWEP	24	14,45	22,—	N. 8	3,00	—	—			
	ZEWNA	61	12,5	20,—	SM 5	2,60	565	203			
	ZEWOR	94	14,7	25,—	SM 5	2,60	520	203			
	ZEWTY	113	12,5	20,—	SM 5	2,60	565	203			

Description	Code Word	Bullet			Powder		Velocity V_{25} m/sec.	Energy E_{25} mkg	Barrel length	Maximum pressure kg/cm²	
		Factory No.	Weight in grammes *	Length in M/M **	Kind	Weigth in grammes *					
9,5 × 57 M. Sch. (.375 or 9,5 M/M Mannlicher-Schönauer)	ZEYIR	64	17,5	26,—	SM 5	2,25	600	321		2700	
	ZEYLJ	96	17,5	26,—	SM 5	2,25	600	321	500		
	ZEYMK	117	16,75	22,5	SM 5	2,25	610	318			
11,15 × 36 R (for Rifle Werndl)	ZEZER	34	18,8	20,—	N. 8	2,10	—	—	—	—	
11,2 × 51 R (Kropatschek-Heisig)	ZEZTO	34	18,8	20,—	N. 8	2,10	—	—	—	—	
11,6 × 60 R (.450/11.6 x 60)	ZEZWY	39	20,5	20,5	N. 8	4,20	—	—	—	—	
12,7 × 60 R	ZIADZ	40	26,6	22,—	N. 8	5,00	—	—	—	—	
CARTRIDGES INTRODUCED RECENTLY											
5,6 × 52 R (.22 High Power)	ZARYK	42	4,65	21,—	SM 5	1,65	840	167	600	2900	
	ZASAF	63	4,65	21,—	SM 5	1,65	840	167	600		
9,3 × 62 (.366 or 9,3 M/M Mauser)	ZICAY	93	18,5	30,—	SM 5	3,65	685	443	680	3400	
9,3 × 74 R with rim	ZICIB	93	18,5	30,—	SM 5	3,70	675	430	650	3000	
10,75 × 68 (.423 or 10,75 M/M Mauser)	ZICZE	55	22,5	27,5	SM 5	4,10	600	413	700	2900	
	ZIDAZ	90	22,5	27,5	SM 5	4,10	600		700		

* 1 gramme = 15,4325 grains.

** 1 M/M (milimeter) = 0,03937 inches.

654-32 PRINTED IN CZECHOSLOVAKIA BY OBČANSKÁ KNIHTISKÁRNA, PRAHA
VIP800a0649